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# The effects of gender of observers and victims on perceptions of fairness in unjust situations.

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*University of Nebraska at Omaha*

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THE EFFECTS OF GENDER OF OBSERVERS AND VICTIMS  
ON PERCEPTIONS OF FAIRNESS  
IN UNJUST SITUATIONS

A Thesis  
Presented to the  
Department of Psychology  
and the  
Faculty of the Graduate Collège  
University of Nebraska

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts, Psychology  
University of Nebraska at Omaha

by  
Laura Leah Josoff  
April, 1993

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THESIS  
ACCEPTANCE

Acceptance for the faculty of the Graduate College,  
University of Nebraska, in partial fulfillment of the  
requirements for the degree Master of Arts, Psychology,  
University of Nebraska at Omaha.

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April 21, 1993

Date

## Abstract

The effects of gender of observers and victims on perceptions of fairness in unjust situations were investigated. Subjects participated in group sessions and were blocked by gender and then assigned to either the disadvantaged female (read a composition concerning a female who received poor outcomes) or disadvantaged male (read a composition concerning a male who received poor outcomes) group. After reading the composition, subjects completed a questionnaire which was related to the composition. It was expected that the perception of fairness would depend upon the gender of the perceiver as well as the gender of the victim. Specifically, females would perceive the procedures and outcomes in the hypothetical situation as significantly more unfair than would males. Results supported this hypothesis and showed a main effect for situation (i.e., disadvantaged female scenario versus disadvantaged male scenario). In other words when a female received poor outcomes, both male and female subjects perceived more procedural and outcome unfairness than when a male received poor outcomes. Analysis of responses to a measure of empathy supported research that found females to be more empathetic than males. However, the empathy scale was not psychometrically acceptable. Therefore, these results should be interpreted with caution.

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The Effects of Gender of Observers and Victims  
on Perceptions of Unfairness in  
Unjust Situations

Research has shown that men are often paid more than women in today's work force (Frieze, Olson, & Good, 1990). These authors claim that this advantage that males have over females appears to be stable and, in part, the result of unfair procedures. Knowledge of these procedures could lead people to express concern about others. The present research will examine the effects of gender and outcome differences on fairness in procedurally unjust situations.

Sex Discrimination in Pay

According to Crosby (1984), women earn significantly less money than men and are much more likely to be the victims of sex discrimination. She stated that in 1984 the labor market was largely segregated and women earned approximately 60 cents on the male dollar. These statistics held true even when males and females were shown to be nearly equivalent in levels of education, job experience, and training (Crosby, 1984; Frieze, Olson, & Good, 1990). Crosby's research showed that women felt they were discriminated against as a group; although, when questioned concerning their own individual status, they believed erroneously that they were unaffected by this bias.



Major, Vanderslice, and McFarlin (1984) claimed that there are gender differences in expectations of pay and that, compared to males, females hold lower pay expectations and a lower sense of personal entitlement with respect to pay. Callahan-Levy and Messe (1979) also examined the idea that females perceive less of a connection between monetary rewards and their work than do males. These researchers suggested that the lack of a relationship between traditional female tasks (e.g., mothering or housekeeping) and monetary reward may generalize to other situations. They claimed that women are willing to work for less money than men and tend not to act in ways that would lead them to be economically successful. Dimitrovsky, Yinon, and Singer (1989) found that men rated themselves more likely to succeed than did women and had higher peer ratings of possible success.

#### Fairness and Social Comparisons

Research to date has enlightened our view of how women are discriminated against and appear to do little or nothing to personally realize and combat the problem. According to Crosby (1984), females may deny they are disadvantaged because they feel the need to believe in a just world. This is a world in which people get what they deserve and all is fair for the most part. Therefore, even though females may

realize that women in general are discriminated against, they choose to view their own personal predicaments in a positive light, believing that they are receiving what they deserve, and to reject the idea that they themselves are discriminated against.

The concept of relative deprivation would argue against the idea of a just world. In its simplest form it is defined as the idea that persons may feel deprived of a desirable thing relative to another person, ideal, or some other social category (Walker & Pettigrew, 1984). These authors stated that the social comparisons individuals make define and change their social identity. Walker and Pettigrew (1984) stated that if outcomes are judged to be unfavorable as a result of the comparisons, and if the individuals judge the outcomes to be both unfair and stable, then the individuals would be in a state of relative deprivation. Therefore, if a female compares herself to a male or males and finds her outcomes to be unfavorable, unfair, and stable, one could consider her to be in a state of relative deprivation. This female would realize that she is being discriminated against. According to Cropanzano and Folger (1989), relative deprivation will exist when referent outcomes are higher, or when one can imagine alternative circumstances that would lead to better outcomes.

Collective Deprivation

Walker and Pettigrew (1984) claimed that most individuals make comparisons within their social categories rather than between their groups and other groups. They noted that this type of comparison does not usually lead to social action. It is the concept of collective relative deprivation that has been associated with militant action (Tougas & Veilleux, 1988). According to Tougas and Veilleux, collective relative deprivation has an affective component, dissatisfaction, that is influenced by the intensity of one's affiliation with one's group and the perception of unjustified inequalities between one's group and another group. They suggested that people desire to have a positive social identity and will, therefore, make comparisons between their group and another for the purpose of finding a favorable position for their group. If individuals are not satisfied with their own group, they may leave it and attempt membership in an alternate group. Problems arise when individuals are unable to leave their group due to unchangeable characteristics such as gender, race, or some other similar reason.

Tougas and Veilleux (1988) stated that when members of disadvantaged groups note their positions through social comparison processes, collective action strategies are

formed. They hypothesized that if "...one belongs to an underprivileged group and strongly identifies with it, he/she will engage in social action only if he/she feels dissatisfied with the group's situation" (p.17). Therefore, a female who believes that women are discriminated against and identifies with them as a group, would engage in some sort of social action if she experienced dissatisfaction with her group's situation.

#### Procedural Justice

Dyer and Theriault (1976) found that a female could experience dissatisfaction with pay if she perceived incongruencies between the amount of pay she felt she should receive and the amount that she actually received. A female could also experience dissatisfaction if she concluded that she was selected for a position because of unfair procedures.

Chako (1982) found that women who were selected for managerial positions because of their gender perceived this as an unjust procedure; consequently, they experienced more role conflict and felt less organizational commitment and job satisfaction than individuals who perceived that their selections were due to just procedures. He claimed that using unjustified and irrelevant procedures as the basis for selection would cause men as well as women to experience

feelings of inequity.

Nacoste and Lehman (1987) also studied unjust procedures and stated that being selected by unfair procedures leaves the person feeling stigmatized. They suggested that believing you have achieved a certain outcome, such as comparable pay, by procedures that are unfair, actually discredits the outcome. It is clear that the concept of fair procedures is important for individuals to be content with their outcomes.

#### Fairness Effects

In recent years, research has found that procedural justice judgements play a major role in organizations by affecting individual behaviors and attitudes (Lind & Tyler, 1988). Greenberg (1987) discussed both procedural and distributive justice and stated that, "Whereas distributive justice focuses on the fairness of a distribution of resources, procedural justice focuses on the fairness of the procedures used to make those distributive decisions" (p.55).

The notion of fairness is important to individuals working in organizations. According to Nacoste and Lehman (1987), there is evidence that people evaluate organizations by the fairness of the distribution of outcomes. Research by Konovsky, Folger, and Cropanzano (1987) examined the

effects of both procedural and distributive justice on two employee attitudes, organizational commitment and satisfaction with pay. They found that organizational commitment was associated strongly with procedural fairness, and that satisfaction with pay was associated strongly with distributive fairness. These findings support the idea that not only are the procedures leading to an outcome important, but the actual distributive component, or outcome, also has a strong influence on one's perceptions of fairness.

Mark (1983) studied people's reactions to being deprived of desired outcomes and the procedural justice involved in the process. He concluded that when individuals do not receive the outcomes they should, due to unfair procedures, they may react in different ways. He claimed "...that they may feel angry; they may strive even harder for their goal; they may denigrate their original goal; or they may doubt their self worth" (p.115). Folger and Martin (1984) also spoke of the importance of outcomes and the procedures used to obtain them. They noted how people use social comparisons of outcomes in order to determine how equitable their outcomes are.

#### Responses to Injustice

Martin, Skully, and Levitt (1990) suggested that, "We should broaden our conceptions of procedural and

distributive justice by incorporating emotional and ideological concerns" (p.286). They claimed that emotional concerns are important, especially with disadvantaged individuals in unjust situations. Cropanzano and Folger (1991) also considered emotional concerns and reactions to unjust situations. They found that when subjects experienced a negative outcome coupled with an unfair procedure, they were most likely to take action against the persons or organizations responsible for their predicament. These researchers claimed that subjects in situations with both distributive and procedural injustice will express intent to take action and report the injustice.

Mikula and Schlamberger (1985) also reported that victims of unjust events spoke of more action-related intentions than non-affected observers. Reis and Burns (1982) found that people had a need to take action to eliminate injustice when there was a discrepancy between pay level and a personal standard. Research by Brockner (1990) on the effects of layoffs in the work place also supported typical injustice reactions. He found that, to the extent employees viewed the layoff procedures as unfair, they became more withdrawn from their jobs and the organization.

Cropanzano and Folger (1991), in support of the above research, claimed that an individual's perceptions of

procedural unfairness resulting in negative outcomes lower his/her evaluation of the entire organization, and may trigger collective action. They also spoke of the effects of procedural injustice resulting in positive outcomes. They proposed that individuals for whom procedural unfairness is both consistent and advantageous, such as favoring their gender or race, may eventually ignore the unfairness. Cropanzano and Folger claimed that this would occur because the stable nature of the advantageous outcome would erase any fear of possible negative outcomes in the future.

#### Justice and Empathy

Procedural justice research argues that if one experiences unfair procedures but fair outcomes, one will not express much resentment or be moved toward action (Cropanzano & Folger, 1991). However, the premises involved with empathy and social consciousness would argue against the position that one must be a victim of unjust procedures and outcomes to be moved to express concern.

The concept of empathy suggests that an observer could feel distress for a victim of unjust procedures and outcomes and be moved to express concern for that person, even if the observer is not personally a victim of unfair outcomes.

Empathy has been defined as taking on the emotional state of another and achieving a kind of "oneness" with the



other person (Batson 1990). By identifying with an individual, one can be said to care for them in general (Batson 1990). Archer, Diaz-Loving, Gollwitzer, Davis, and Foushee (1981) claimed that empathy is the result of emotional responses based on physiological arousal. They maintained that, "Taking the perspective of a person in need tends to increase one's empathic emotional response," and further, that "empathic emotion, in turn, increases motivation to see that person's need reduced" (p.786). Archer et al. also claimed that an individual's tendency to be empathic toward others may be a stable personality factor.

#### Empathy and Helping Behavior

Research by Eisenberg, Shell, Pasternack, and Lennon (1987) examined gender differences and interrelations between moral judgement, empathy, and behavior in children. They found that "empathy was positively related to needs-oriented judgments and to higher level pro-social reasoning" (p. 712). They also showed that empathy increased with age for girls, but not for boys. This could have interesting implications for male and female adults. Hoffman (1977) found evidence that adult females experienced significantly more empathy than adult males. These findings suggest that female subjects in this study may be more

empathetic than the male subjects.

Batson, O'Quin, Fultz, Vanderplas, and Isen (1983) researched the role of empathy in helping behavior. They examined the idea that "...witnessing another person in need can lead to two qualitatively distinct emotional responses: personal distress and empathy" (p.706). They claimed that the personal distress component within witnesses produces responses to reduce their own distress. The empathic component produces responses to reduce distress of the person in need. Both components are motivating and would lead one to express concern for a person in need.

Research by Batson, Duncan, Ackerman, Buckley, and Birch (1981) suggested that feeling empathy for a person in need is an important motivator of helping behavior (Coke, Batson, & McDavis, 1978; Krebs, 1975). They also felt that a person's helping is altruistic to the extent the person helps to reduce the distress of another in need but receives no benefit for helping. This implies that a person who feels empathy toward others would help them but receive no benefit themselves. In some cases, the idea of altruism could prove false. For example, if a female were to feel empathetic toward another female and, in an unjust situation, engage in helping behavior for her, she could be benefitting herself by improving the status of a member of the collective group

with which she identifies, specifically females. Brown (1986) also spoke of rewards gained from empathic behavior. These include fulfilling a moral obligation, internal "happiness," or other such intrinsic rewards.

This type of humanitarian interest in another could lead one to express concerns for, and even motivate helping behavior toward, victims of procedural injustice.

This concept of empathy should also have implications for collective group victims of procedural injustice. However, Tyler and McGraw (1986) suggested that objectively disadvantaged groups often fail to take action to rectify their disadvantaged state. They researched the idea that people feel procedures are actually more important than the fairness of outcomes. This introduces the concept of voice. Tyler and McGraw (1986) claimed that people view the importance of voice and the opportunity to voice their concerns as evidence of fairness of procedures and outcomes.

#### Victim Derogation

Crosby and Clayton (1986) stated that people hold societal values which can overcome their present situations and cause them to view unjust procedures as fair. These views once more compliment the idea of a just world and lend support for victim derogation arguments, but they disagree with the components and properties of empathy discussed

earlier. Lerner (1970) stated that victims of undeserved, unfair suffering run the risk of being condemned by observers. He claimed that this would happen because the observers want to believe in a just world and would, therefore, derogate the victims. Gruman and Sloan (1983) found victim derogation of sick persons relative to healthy individuals. Bandura (1990) also noted the derogation and dehumanization of victims. He stated that there is a need for our society to establish safeguards against such immoral practices.

It seems that in order to believe in a just world, one must justify all that happens, whether it be negative or positive. If there appears to be no external reason for receiving unjust outcomes, then it would be logical to attribute the negative consequences to causes internal to the individual receiving them. Therefore, in order for one to empathize with another in need and, at the same time, to believe in a just world, one would have to make attributions of external causes for the injustice.

It is intriguing to note that unfair procedures could be motivating for a person not subjected to unfair outcomes, but who feels empathy toward one who is. Cropanzano and Folger (1991) claimed that this may be particularly true if the wronged individual is a friend or similar other.

### Hypotheses

These suggestions lead to the main research questions of this study. Given an unjust situation, in a workplace, would an observer's perceptions of fairness depend upon the gender of the person being treated unfairly? Furthermore, would the gender of the observer affect perceived fairness of the situation? In other words, would perceived fairness be the product of an interaction between the gender of the observer and the gender of the victim of an unjust decision?

#### Hypothesis 1

It was hypothesized that the perception of procedural and outcome fairness would depend upon the gender of the perceiver. Therefore, there should be a main effect for gender of subjects. Specifically, it was hypothesized that females would perceive the procedures and outcomes in a hypothetical situation as significantly more unfair than would males. This should be due to the fact that females express significantly more empathy than males. However, an interaction was also expected.

#### Hypothesis 2

It was hypothesized that females who read about a disadvantaged female would perceive the procedures and outcomes in that situation as significantly more unfair than the perception of unfairness expressed by females who read

about a disadvantaged male. Furthermore, it was expected that females in the disadvantaged female condition would express significantly more unfairness than males in any treatment condition.

### Hypothesis 3

It was expected that males who read a scenario about a disadvantaged male would perceive more unfairness in that situation than males who read a scenario about a disadvantaged female.

### Empathy measure

A measure of empathy was administered to determine whether or not females express more empathy than males and to compare subjects in the four conditions. It was predicted that females would express more empathy as compared to males which would support prior research findings.

## Methods

### Subjects

The subjects were one hundred twenty undergraduate male and female students participating for extra credit in an introductory psychology course. All subjects were attending the University of Nebraska at Omaha, which is a medium-sized, urban, commuter university. As is traditional, the students who served as subjects in this

psychology experiment received one point of extra credit per half hour.

### Procedure

#### Experimental Methodology Basis

The methods used in this experiment were based on the experimental methodology that Bem (1972) devised. He referred to it as interpersonal simulation. Bem (1972) claimed that observer-subjects would "...reproduce the patterns of results generated by actual subjects in the original experiments" (p. 23). He stated that "...each observer-subject attempts to infer the attitude of a single "other" (p. 24). In the simulation the observer "stands in" for the actual subject.

A possible limitation to these claims was suggested by Tyler (1989) who claimed that "...the range of procedural justice is limited by the expectations of future interactions" (p.838). He felt that if persons perceive that they will not be in a similar (unjust) situation in the future, then they may focus less heavily on issues of procedural justice and, therefore, their responses may be affected by this knowledge.

This would argue against Bem's (1972) claim that observer-subjects would duplicate patterns of results obtained by subjects in actual experimental conditions.

According to Tyler (1989) this would especially be the case in procedural justice experiments when subjects perceive no relationship between the experiments and their futures.

However, the premises presented earlier concerning the ideas of empathy and procedural justice support the idea that individuals can identify with other individuals and achieve a sort of "oneness" with them (Batson, 1990).

Therefore, in this experiment, each subject participated as an observer-subject. Each was exposed to a description of a hypothetical situation and then asked to reveal their views on a questionnaire.

#### Pilot Test

A pilot test was conducted for the purpose of determining a "gender neutral" product to be used in the hiring process description. Sixteen students, fitting the same description as designated previously in the "Subjects" section, were given a questionnaire which named fifteen products that required being packaged and inspected. Subjects were then asked to indicate whether they felt the products were traditionally female, male, or gender neutral in nature. Results indicated that the micro-computer was considered to be the most gender neutral product, and therefore, it was used in the short description of one company's hiring process.



### Materials

The materials used consisted of a short description of one company's hiring process (see Appendix A), and a questionnaire which is related to the description (see Appendix B). Parentheses following the questions indicate whether they are measuring procedural or outcome fairness and were not included on the actual questionnaires given to subjects. The only changes made on the descriptions across conditions pertained to the gender of the disadvantaged individual. Each questionnaire had an identifying mark on it which indicated to which of the four respective groups the subject was assigned.

Responses to the first 8 questions on the questionnaire dealt with fairness issues and required subjects to make distinctions on a seven point scale. Anchors of these scales related to and depended upon the content of each respective question as shown in Appendix B. Questions 1, 3, and 6 were used to measure procedural fairness, and questions 2, 4, 5, and 7 were utilized to measure distributive (outcome) fairness. Responses to the last 4 questions measured subject's empathy levels, and were used as a means of verifying that female subjects were truly more empathetic than males. Subjects answered these questions, 9 through 12, either true or false.

### Experimental Procedures

Subjects participated in group sessions and were blocked by gender and then assigned to either the disadvantaged female (read a composition concerning a female who received poor outcomes) or disadvantaged male (read a composition concerning a male who received poor outcomes) group. The experimenter informed the subjects that they would be reading a short description of one company's hiring process and then be expected to complete a questionnaire which was related to the description. Oral consent to participate in the experiment was obtained from the subjects before each experimental session began. It was stressed to the subjects that their answers to the questionnaire would be strictly confidential and that they could not be identified by their answers; therefore, they needed to be as honest as possible when completing the questionnaire. They were also told they were free to end the experiment at any time if they felt uncomfortable with it. After subjects completed the questionnaire, they were met individually by the experimenter and debriefed. They were asked if they had any questions and thanked for their participation.

All hypotheses were tested using a 2x2 (perceiver X victim) analysis of variance design. Both main and interaction effects were predicted. The empathy measure was

also analyzed using a 2x2 analysis of variance to allow comparisons across conditions.

## Results

### Analysis 1

Reliability statistics were calculated on each of the three scales (i.e., procedural fairness, outcome fairness and empathy) to show internal consistency. Specifically, Cronbach's alpha (SPSS Reference Guide, 1990) was computed, and the results showed moderate to low internal reliability for each scale as follows: outcome fairness, alpha = .5009; procedural fairness, alpha = .6626; and empathy, alpha = .3733.

A correlation matrix was calculated using all of the questionnaire items and computed variables (procedure, outcome and empathy) to determine if items correlated well within each scale, with the other scale items, and with the computed variables. Most of the correlations were significant at the  $p < .05$ , or the  $p < .01$ , levels; however, several were moderate to low within each scale. Results showed moderate correlations within the outcome and procedural scales, low correlations within the empathy scale variables, and low correlations between empathy and the other two scales. Although significant, the correlation between the computed procedural and outcome scales was

moderate at .49,  $p < .01$ .

Due to the low correlational and internal consistency findings, certain variables that did not correlate well with others of the same scale were deleted, and the results were recalculated. These results are reported later in the text.

The empathy measure scale was scored by reverse scoring questions 9 and 11 (refer to Appendix B), adding up each subject's score (i.e. higher score = higher empathy rating) and dividing by four (the number of questions). Results supported research claiming that females, as a group, are more empathetic than males. There was a significant gender main effect for empathy,  $F(1, 116) = 12.600$ ,  $p < .05$ ; the female empathy mean was 1.75, while the mean for males was 1.58. Successful randomization was achieved and there were no empathy differences across conditions.

As predicted, the first calculation of results showed that perception of both procedural and outcome fairness depends upon the gender of the perceiver. As shown in Tables 1 and 2, the mean scores for females as a group were 2.36 for outcome fairness and 1.84 for procedural fairness. The mean scores for males as a group were 2.75 for outcome fairness and 2.26 for procedural fairness. Females, as a group, rated outcomes as more unfair than did males,  $F(1, 116) = 4.240$ ,  $p < .05$ ; the same was true for procedural

Table 1

Descriptive Statistics for Outcome Fairness Main Effects

	Mean	Std Dev	N
Gender			
Females	2.36	1.06	60
Males	2.75	1.12	60
Situation			
Dis. female	2.19	.97	60
Dis. male	2.92	1.13	60

Table 2

Descriptive Statistics for Procedural Fairness Main Effects

	Mean	Std Dev	N
Gender			
Females	1.84	1.04	60
Males	2.26	1.00	60
Situation			
Dis. female	1.77	.88	60
Dis. male	2.33	1.11	60

fairness,  $F(1, 116) = 5.475, p < .05$ .

The second hypothesis, which expected that females selected to read the composition concerning the disadvantaged female would express significantly more unfairness than any of the remaining three subject groups, was partially supported. Tables 3 and 4 present descriptive statistics by cell. A multiple comparison test, Tukey-HSD (SPSS Reference Guide, 1990), was calculated to test the significant difference between cell means. Results from the Tukey-HSD showed that female subjects in the disadvantaged female situation expressed significantly more outcome unfairness than females in the disadvantaged male situation and males in the disadvantaged male situation ( $p < .05$ ).

The Tukey-HSD results for procedural fairness were basically the same as those found for outcome fairness. Females in the disadvantaged female situation expressed significantly more unfairness than females in the disadvantaged male situation and males in the disadvantaged male situation ( $p < .05$ ).

The third hypothesis was that males selected to read about the disadvantaged male would express more unfairness than the group of males selected to read about the disadvantaged female. This was not only unsupported, but the opposite was found to be true. Males in the

Table 3

Descriptive Statistics for Outcome Fairness By Cell

Group	Mean	Std Dev	N
Females			
Dis. female	1.98	.96	30
Dis. Male	2.73	1.06	30
Males			
Dis. female	2.39	.94	30
Dis. male	3.11	1.18	30

Table 4

Descriptive Statistics for Procedural Fairness By Cell

Group	Mean	Std Dev	N
Females			
Dis. female	1.50	.83	30
Dis. Male	2.18	1.13	30
Males			
Dis. female	2.04	.86	30
Dis. male	2.48	1.10	30

disadvantaged female situation expressed significantly more outcome unfairness than did males in the disadvantaged male situation ( $p < .05$ ).

Tables 1 and 2 show the main effect for situation (i.e., disadvantaged female scenario versus disadvantaged male scenario). The disadvantaged female situation received higher ratings of outcome unfairness,  $F(1, 116) = 14.864$ ,  $p < .01$ , and procedural unfairness,  $F(1, 116) = 9.479$ ,  $p < .01$ , across both male and female subjects, than did the disadvantaged male situation.

Table 5 shows the omega square values (Comrey, Bott, & Lee, 1989) calculated to document the percent of variance accounted for by each significant effect. These values indicate that the gender of the applicant (victim) was much more important than the gender of the observer subject, particularly on the outcome measure.

### Analysis 2

Due to low correlational and internal consistency findings as well as comments from subjects regarding the ambiguity of two items that asked for perceptions of the applicant (victim), a second analysis was performed. Items that did not correlate well with others in the same scale, and that were identified as ambiguous by subjects in the study were discarded (item 4 for outcome unfairness,



Table 5

Omega Square Values for Outcome and Procedural Unfairness	
	<u><math>\Omega</math> value</u>
Outcome unfairness	
Gender	.016
Situation	.102
Procedural unfairness	
Gender	.034
Situation	.064

and item 3 for procedural unfairness) (refer to Appendix B). The results were recalculated with two items representing procedural unfairness and three items representing outcome unfairness.

Results confirmed the conclusions drawn from the first analysis (see Tables 6 and 7). All previously significant effects remained significant except for one. After recalculating Tukey-HSD, the third hypothesis which expected that males who read about the disadvantaged male would express more unfairness than the group of males who read about the disadvantaged female, was still unsupported on both scales, but the previously significant finding that males in the disadvantaged female situation expressed significantly more outcome unfairness than did males in the disadvantaged male situation, was no longer significant.

#### Discussion

Results supported the first hypothesis and showed a main effect for gender in which females perceived significantly more unfairness for the disadvantaged individuals as opposed to the perceptions of unfairness expressed by male groups.

The empathy findings support empathy and social consciousness research which suggests that an observer could feel distress for a victim of unjust procedures and outcomes

Table 6

Analysis of Variance Results for Recalculated Procedural Fairness

Source of Variation	Sum of Squares	DF	Mean Square	F
Main Effects				
Gender	7.752	1	7.752	6.101
Situation	14.352	1	14.352	11.295
2-Way Interactions				
Gender by Situation	1.752	1	1.752	1.379
Explained	23.856	3	7.952	6.258
Residual	147.392	116	1.271	
Total	171.248	119	1.439	

Table 7

Analysis of Variance Results for Recalculated Outcome Fairness

Source of Variation	Sum of Squares	DF	Mean Square	F
Main Effects				
Gender	6.690	1	6.690	6.142
Situation	18.408	1	18.408	16.902
2-Way Interactions				
Gender by Situation	.890	1	.890	.817
Explained	25.988	3	8.663	7.954
Residual	126.337	116	1.089	
Total	152.325	119	1.280	

and be moved to express concern for that person, even if the observer is not personally a victim of unfair outcomes. They also support research by Hoffman (1977) who found evidence that adult females experienced significantly more empathy than adult males. Given the poor internal consistency of the empathy scale in this study however, these results should be interpreted with caution.

The multiple comparison procedures run on the individual cell means lent some support for the empathy research. Females in the disadvantaged female situation expressed more unfairness than males in the disadvantaged male situation, but they also showed more unfairness than females in the disadvantaged male situation. These results partially supported the second hypothesis and showed a significant main effect for situation (gender of the applicant). It is interesting that females in this study did not only express unfairness because they are females (because of their gender), but also because of the gender (female) of the victim in the situation they were experiencing.

This significant main effect for situation, as well as the supportive omega square values, could be important in showing that although females may be more empathetic in general, as compared to males, the expressions or actions of

both genders are greatly affected by the situations they encounter. In other words, situations may be more important in deciding reactions or expressions than the gender of the persons doing the reacting or expressing. This could be true even though a main effect for gender was found to be significant in this study.

Procedural justice research by Cropanzano & Folger (1991) claimed that unfair procedures could be particularly motivating for a person not subjected to unfair outcomes but who feels empathy toward one who is. They stated that this may be particularly true if the wronged individual was a friend or similar other. This lends support for the significant main effect for gender. Female subjects supported this research, but male subjects did not. It could be that today's male college students are not as biased toward their own gender as this study may have suggested.

One possible reason for the significant main effect for situation may be the common knowledge that females in today's workplace are, in general, discriminated against in matters concerning pay. This topic is often talked about on news shows, in newspapers, in magazines, and in other public media. This exposure may have helped individuals to believe that the disadvantaged female in the hypothetical hiring

scenario was a victim of the same factors that influence actual workplace patterns that exist today, and this may, therefore, have caused them to express more unfairness as a reflection of their concern that this is a well known problem that needs to be remedied. This reason also offers an explanation for the results of responses to the question on subject's identity with the applicant (question 8). This item correlated low with all other items and variables, and may therefore offer another argument for the strong situation effect.

One more possible explanation for the findings of this study can be drawn from research by Eisenberg, Shell, Pasternack, and Lennon (1987), who claimed that "empathy was positively related to needs-oriented judgments and to higher level pro-social reasoning" (p. 712). It is possible that college students are at a higher level of pro-social reasoning and, therefore, would express more empathy toward victims (females) who are often victims in certain situations (unfair pay situations) for the purpose of eventually eliminating these unfair situations. This also supports the idea that today's college students, especially males, are not particularly biased toward their own gender.

There are limitations to the study that need to be addressed. External validity may be a problem since

undergraduate students were the only subjects and the experiment was completed in a lab setting. Future research is needed to support the obtained results, and it is suggested that these replications be enacted in field settings with a more diverse sample of subjects so that the results may be more generalizable.

Other limitations include the moderate reliability coefficients and the moderate and low correlations that were computed. After discarding the item in the procedural unfairness scale that appeared to be ambiguous, and after doing the same for the ambiguous outcome unfairness scale item, the significant main effect results remained unchanged, but the reliability coefficients did not greatly improve as was expected. One reason for the lack of a definite change in reliability, may be restriction of range. Future studies would need to include reliable multiple item measures for both the procedural and outcome unfairness scales.

The low reliability for the empathy measure, as well as the low correlations with the other variables, could also be due to restriction of range. Future replications would need to employ a more substantial measure of empathy utilizing more questions, and perhaps move away from the true/false response format.

The moderate correlations between the procedural and outcome scales ( $r = .49$  in Analysis 1;  $r = .65$  in Analysis 2) were interesting because they suggest that procedural unfairness and outcome unfairness are considered to be conceptually different types of fairness; yet in the present study the same results (main effects for gender and situation) were achieved using separate measures of each concept. This could have implications for the procedural justice literature.

This study could have implications for improving the plight of women in today's work force. Both male and female subjects expressed significant unfairness toward a female victim of unjust procedures and outcomes. This shows that, in this college population, subjects may be aware of the common knowledge that females are discriminated against in today's workforce, and that males may be aware of their advantageous positions and could therefore possibly help to alleviate future pay discrimination against females in the workforce. It is important that males and females cooperate with each other for the purpose of eliminating discriminatory practices and then, once accomplished, both genders will benefit equally.



### References

- Archer, R. L., Diaz-Loving, R., Gollwitzer, P. M., Davis, M. H., & Foushee, H. C. (1981). The role of dispositional empathy and social evaluation in the empathic mediation of helping. Journal of Personality and Social Psychology, 40, 786-796.
- Bandura, A. (1990). Selective activation and disengagement of moral control. Journal of Social Issues, 46, 27-46.
- Batson, C. D. (1990). How social an animal? The human capacity for caring. American Psychologist, 45, 336-346.
- Batson, C. D., Duncan, B. D., Ackerman, P., Buckley, T., & Birch, K. (1981). Is empathic emotion a source of altruistic motivation? Journal of Personality and Social Psychology, 40, 290-302.
- Batson, C. D., O'Quin, K., Fultz, J., Vanderplas, M., & Isen, A. M. (1983). Influence of self reported distress and empathy on egoistic versus altruistic motivation to help. Journal of Personality and Social Psychology, 45, 706-718.
- Bem, D. J. (1972). Beliefs, attitudes, and human affairs. Belmont: Brooks/Cole.

- Brockner, J. (1990). Scope of justice in the workplace: How survivors react to co-worker layoffs. Journal of Social Issues, 46, 95-106.
- Brown, R. (1986). Social Psychology: The second edition. New York: Free Press.
- Callahan-Levy, C. M., & Messe, L. A. (1979). Sex differences in the allocation of pay. Journal of Personality and Social Psychology, 37, 433-446.
- Chako, T. I. (1982). Women and equal employment opportunity: Some unintended effects. Journal of Applied Psychology, 67, 119-123.
- Coke, J. S., Batson, C. D., & McDavis, R. (1978). Empathic mediation of helping: A two stage model. Journal of Personality and Social Psychology, 36, 752-766.
- Comrey, A. L., Bott, P. A., & Lee, H. B. (1989). Elementary statistics: A problem solving approach. Dubuque, IA: William C. Brown.
- Cropanzano, R., & Folger, R. (1989). Referent cognitions and task decision autonomy: Beyond equity theory. Journal of Applied Psychology, 74, 293-299.
- Cropanzano, R., & Folger, R. (1991). Procedural justice and worker motivation. In R. M. Steers & L. W. Porter (Eds.). Motivation and Morale (pp.131-143). New York: McGraw Hill.

- Crosby, F. (1984). The denial of personal discrimination. American Behavioral Scientist, 27, 371-386.
- Crosby, F., & Clayton, S. (1986). Introduction: The search for connections. Journal of Social Issues, 42, 1-9.
- Dimitrovsky, L., Yinon, S., & Singer, J. (1989). Masculine and feminine traits: Their relation to suitedness for and success in training for traditionally masculine and feminine army functions. Journal of Personality and Social Psychology, 57, 839-847.
- Dyer, L., & Theriault, R., (1976). The determinants of pay satisfaction. Journal of Applied Psychology, 61, 596-604.
- Eisenburg, N., Shell, R., Pasternack, J., & Lennon, R. (1987). Prosocial development in middle childhood: A longitudinal study. Developmental Psychology, 23, 712-718.
- Folger, R., & Martin, C. (1984). Relative deprivation and referent cognition: Distributive and procedural justice effects. Journal of Experimental and Social Psychology, 22, 531-546.
- Frieze, I. H., Olson, J. E., & Good, D. C. (1990). Perceived and actual discrimination in the salaries of male and female managers. Journal of Applied Psychology, 20, 46-67.

- Greenberg, J. (1987). Reactions to procedural injustice in payment distributions: Do the means justify the ends? Journal of Applied Psychology, 72, 55-61.
- Gruman, J. C., & Sloan, R. P. (1983). Disease as a justice: Perceptions of victims of physical illness. Basic and Applied Social Psychology, 4, 39-46.
- Hoffman, M. L. (1977). Sex differences in empathy and related behavior. Psychology Bulletin, 84, 712-722.
- Konovsky, M. A., Folger, R., & Cropanzano, R. (1987). Relative effects of distributive and procedural justice on employee attitudes. Representative Research in Social Psychology, 17, 25-38.
- Krebs, D. L. (1975). Empathy and altruism. Journal of Personality and Social Psychology, 32, 1134-1146.
- Lerner, M. J. (1970). Observer's evaluation of a victim: Justice, guilt, and veridical perception. Journal of Personality and Social Psychology, 20, 127-135.
- Lind, E. A., & Tyler, T. R. (1988). The social psychology of procedural justice (Ch.8). New York: Plenum.
- Major, B., Vanderslice, V., & McFarlin, D. B. (1984). Effects of pay expected on pay received: The confirmatory nature of initial expectations. Journal of Applied Social Psychology, 14, 399-412.

- Mark, M. M. (1983). Expectations, procedural justice, and alternative reactions to being deprived of a desired outcome. Journal of Experimental and Social Psychology, 21, 114-137.
- Martin, J., Scully, M., & Levitt, B. (1990). Injustice and the legitimization of revolution: Damning the past, excusing the present, and neglecting the future. Journal of Personality and Social Psychology, 59, 281-290.
- Mikula, G., & Schlamberger, K. (1985). What people think about an unjust event: Toward a better understanding of the phenomenology of experiences of injustice. European Journal of Social Issues, 15, 37-49.
- Nacoste, R. W., & Lehman, D. (1987). Procedural stigma. Representative Research in Social Psychology, 17, 25-38.
- Reis, H. T., & Burns, L. B., (1982). The salience of the self in responses to inequity. Journal of Personality and Social Psychology, 18, 464-475.
- SPSS Reference Guide, (1990). Chicago: SPSS Incorporated.
- Tougas, F., & Veilleux, F. (1988). The influence of identification, collective relative deprivation, and procedure of implementation on women's response to affirmative action: A causal modeling approach.

Canadian Journal of Behavioral Science, 20, 15-28 .

Tyler, T. R. (1989). The psychology of procedural justice:  
A test of the groups-value model. Journal of  
Personality and Social Psychology, 57, 838-838.

Tyler, T. R., & McGraw, K. M. (1986). Ideology and the  
interpretation of personal experience: Procedural  
justice and political quiescence. Journal of Social  
Issues, 42, 115-128.

Walker, I., & Pettigrew, T. F. (1984). Relative deprivation  
theory: An overview and conceptual critique. British  
Journal of Social Psychology, 23, 311-316 .

## Appendix A

### Hiring Description

John Sentilo is the personnel manager for Botanis Corporation. Recently, customer demand for Botanis' leading product, the mini-computer, has increased. Due to the increase in sales, the president of Botanis has decided to enlarge the mini-computer production area and to hire a new employee to work in it. This employee will be responsible for inspecting and packaging the mini-computers. Applicants for the job have participated in a number of selection procedures and have been narrowed down to the "top choice", which happens to be a male (female). Application materials have been forwarded to John and it is his responsibility to hire the person and to set the new employee's level of pay.

John has been the personnel manager for Botanis Corporation for 2 years, and he feels that he knows exactly what qualifications are needed in an employee for that person to be an excellent performer. Although he doesn't have any evidence, John feels his experience has taught him that females (males), as a group, have been better mini-computer inspectors in the past than males (females). Therefore, John has decided to offer this male (female) applicant for the job \$2.00 less per hour than he would offer female (male) applicants for the job. This is because

he feels that those who are better workers should be paid more. John is also hoping that this will be an incentive for more females (males) to apply, to be hired, and to remain with the company for long lengths of time, and thus increase productivity of the company.



Appendix B  
Questionnaire

Directions

Do not write your name on this questionnaire. Please circle one response for each question that best describes your feelings. You cannot be identified by this questionnaire so please be completely honest.

1. Do you feel that the hiring procedure is fair?(procedural fairness)

1	2	3	4	5	6	7
very	unfair	sort of	neutral	sort of	fair	very
unfair		unfair		fair		fair

2. Do you feel that the pay outcome is fair?(outcome fairness)

1	2	3	4	5	6	7
very	unfair	sort of	neutral	sort of	fair	very
unfair		unfair		fair		fair

3. How do you think the applicant views the hiring procedures?(procedural fairness)

1	2	3	4	5	6	7
very	unfair	sort of	neutral	sort of	fair	very
unfair		unfair		fair		fair

4. How do you think the applicant views the pay outcomes?(outcome fairness)

1	2	3	4	5	6	7
very	unfair	sort of	neutral	sort of	fair	very
unfair		unfair		fair		fair

5. Do you feel that John's pay decision is fair to all applicants?(outcome fairness)

1	2	3	4	5	6	7
very	unfair	sort of	neutral	sort of	fair	very
unfair		unfair		fair		fair

6. Do you feel that the information on which John based his decision is fair?(procedural fairness)

1	2	3	4	5	6	7
very	unfair	sort of	neutral	sort of	fair	very
unfair		unfair		fair		fair

7. Do you feel that John paid the applicant fairly?(outcome fairness)

1	2	3	4	5	6	7
very	unfair	sort of	neutral	sort of	fair	very
unfair		unfair		fair		fair

8. To what extent did you identify with the applicant?

1	2	3	4	5	6	7
not	not much	a little	neutral	some	pretty	very
at all					much	much

Please circle true or false in answer to the following questions.

9. People make too much of the feelings and sensitivities of others.

true

false

10. You tend to get emotionally involved in other's problems.

true

false

11. It is hard for you to see how some things bother others so much.

true

false

12. The people around you have a great influence on your moods.

true

false